

## 1 Amp. Glass Passivated Ultrafast Recovery Rectifier

<p><b>Dimensions in mm.</b></p> <p><b>DO-41 (Plastic)</b></p> <p><b>Mounting instructions</b></p> <ol style="list-style-type: none"> <li>1. Min. distance from body to soldering point, 4 mm.</li> <li>2. Max. solder temperature, 350 °C.</li> <li>3. Max. soldering time, 3.5 sec.</li> <li>4. Do not bend lead at a point closer than 2 mm. to the body.</li> </ol>	<p><b>Voltage</b> 50 to 1000 V.</p> <p><b>Current</b> 1 A at 55 °C.</p>
	<ul style="list-style-type: none"> <li>• <b>Glass Passivated Junction</b></li> <li>• High current capability</li> <li>• The plastic material carries U/L recognition 94 V-0</li> <li>• Terminals: Axial Leads</li> <li>• Polarity: Color band denotes cathode</li> </ul>

### Maximum Ratings, according to IEC publication No. 134

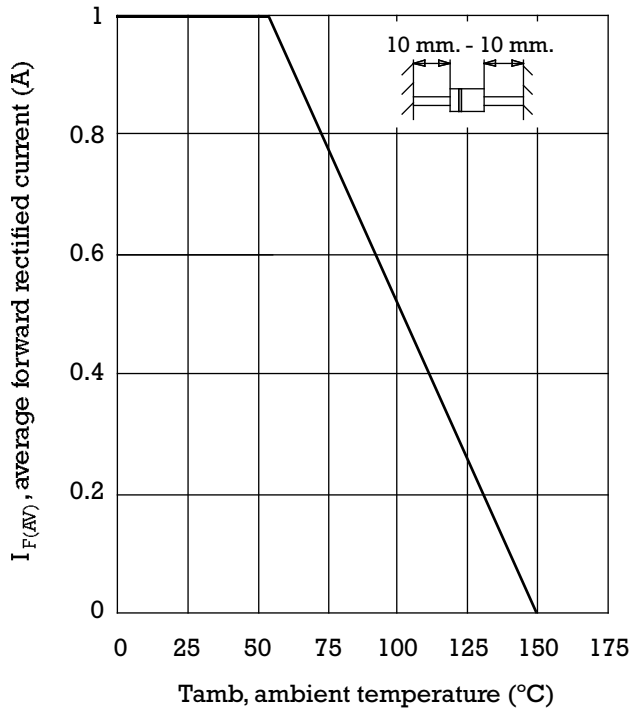
		FUF4001	FUF4002	FUF4003	FUF4004	FUF4005	FUF4006	FUF4007
$V_{RRM}$	Peak Recurrent reverse voltage (V)	50	100	200	400	600	800	1000
$V_{RMS}$	Maximum RMS voltage	35	70	140	280	420	560	700
$V_{DC}$	Maximum DC blocking voltage	50	100	200	400	600	800	1000
$I_{F(AV)}$	Forward current at $T_{amb} = 55\text{ °C}$	1 A						
$I_{FRM}$	Recurrent peak forward surge current	10 A						
$I_{FSM}$	8.3 ms. peak forward surge current (Jedec Method)	30 A						
$t_{rr}$	Max. reverse recovery time from $I_F = 0.5\text{ A}$ ; $I_R = 1\text{ A}$ ; $I_{RR} = 0.25\text{ A}$	50 ns				75 ns		
$C_j$	Typical Junction Capacitance at 1 MHz and reverse voltage of $4V_{DC}$	15 pF						
$T_j$	Operating temperature range	- 65 to + 150 °C						
$T_{stg}$	Storage temperature range	- 65 to + 150 °C						
$E_{RSM}$	Maximum non repetitive peak reverse avalanche energy. $I_R = 0.5\text{ A}$ ; $T_j = 25\text{ °C}$	20 mJ						

### Electrical Characteristics at $T_{amb} = 25\text{ °C}$

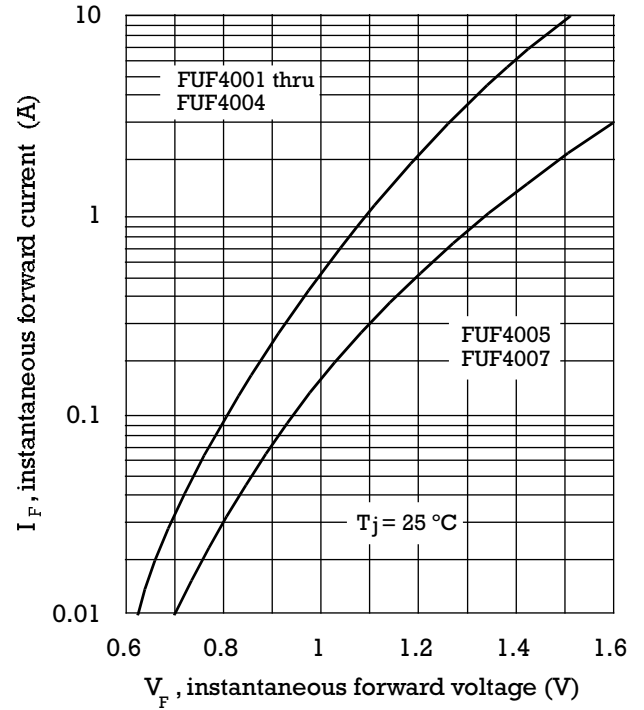
$V_F$	Max. forward voltage drop at $I_F = 1\text{ A}$	1.3 V	1.7 V
$I_R$	Max. reverse current at $V_{RRM}$ at 25 °C	5 $\mu\text{ A}$	
$R_{thj-a}$	Max. thermal resistance ( $l = 10\text{ mm.}$ )	50 °C/W	

## Rating And Characteristic Curves

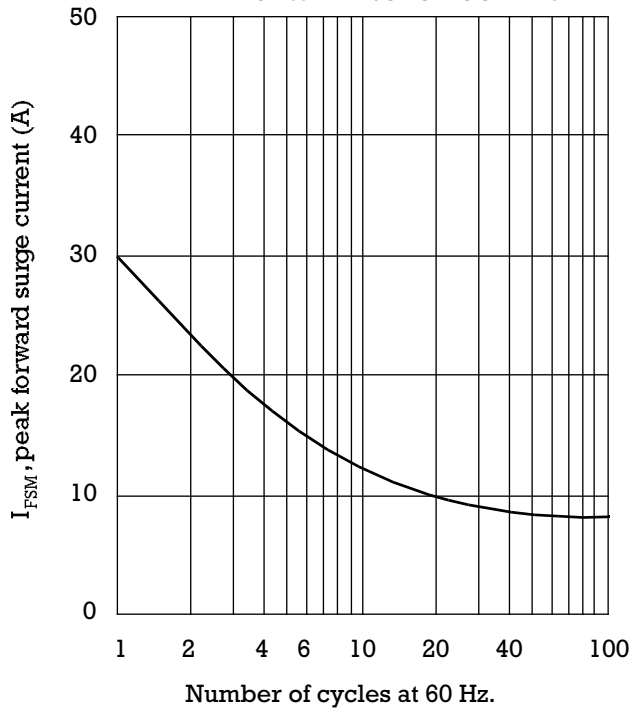
FORWARD CURRENT DERATING CURVE



TYPICAL FORWARD CHARACTERISTIC



MAXIMUM NON REPETITIVE  
PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE

